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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/880,869

06/13/2001

Fu-Ming Chuang

STIS-0059-US

6720

21906

7590

12/24/2003

(PE-20244-AM)

EXAMINER

TROP PRUNER & HU, PC

8554 KATY FREEWAY

SUITE 100

HOUSTON, TX 77024

LOUIE, WAI SING

ART UNIT

PAPER NUMBER

2814

DATE MAILED: 12/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/880,869

Applicant(s)

CHUANG, FU-MING

Examiner

Wai-Sing Louie

Art Unit

2814

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s): _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

The response to the non-final rejection has overcome the rejection of the previous office action. A new ground of rejection is as below.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanitsu (US 6,236,449), previously used, in view of Levis et al. (US 5,902,033), previously used.

With regard to claim 1, Tanitsu discloses a optical apparatus comprising a light source 14, a light integrator 36, and a positive lens unit 40 that are arranged in sequence and that are aligned along optical axis:

- The light integrator 36 processing light radiated by pass through (fig. 1);
- The positive lens unit 40 being disposed between the light integrator 36 and the wafer 60 such that the through the positive lens unit the positive lens unit 40 including at least first and second lens components 40a and 40b, each of which is formed from at least one lens member, wherein the first lens component is movable relative the light integrator along optical axis (see claim 8), the second

lens component is movable (see claim 8) relative to the optical axis for forming image desired focusing, brightness and magnification. Tanitsu discloses the apparatus projects to a wafer 60, but does not disclose the apparatus 10 projects to a liquid crystal display panel. However, the projection system could project the image to other median such as disclosed in Levis et al., where a projector system projecting to a liquid crystal display (Levis col. 4, lines 10-13). Levis et al. teach, the projector system could not product excess heat; the light spreads evenly over the image gate (liquid crystal display); and the system is physically small (Levis col. 1, lines 18-40). Therefore, it would have been obvious for the one with ordinary skill in the art to modify Tanitsu's device with the teaching of Levis et al. to apply the apparatus in the liquid crystal display in order to have the above mentioned advantages.

With regard to claim 2, Tanitsu discloses the light integrator is a glass rod integrator having a reflective inner wall surface (col. 3, lines 45-46).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wai-Sing Louie whose telephone number is (571) 272-1709. The examiner can normally be reached on 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on (571) 272-1705. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1562.

WSI

December 17, 2003.


LONG PHAM
PRIMARY EXAMINER